



**UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

*Ech*

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
|-----------------|-------------|----------------------|---------------------|
| 08/856,376      | 05/14/97    | CHEE M               | 16528X-02501        |

HM12/0710

WILLIAM M SMITH  
TOWNSEND AND TOWNSEND AND CREW  
TWO EMBARCADERO CENTER 8TH FLOOR  
SAN FRANCISCO CA 94111-3834

| EXAMINER    |
|-------------|
| MARSCHEL, A |

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 1631     |              |

DATE MAILED: 07/10/00

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
**08/856,376**

Applicant(s)

**Ch e et al.**

Examiner

**Ardin Marsch I**

Group Art Unit

**1631**



☒ Responsive to communication(s) filed on Apr 17, 2000

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claim

☒ Claim(s) 1-10 is/are pending in the applicat

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-10 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

The art unit designated for this application has changed. Applicant(s) are hereby informed that future correspondence should be directed to Art Unit 1631.

Applicants' arguments, filed 4/17/00, have been fully considered but they are not deemed to be persuasive. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.

Claim 9 is rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

It is noted that a specific human mitochondrial sequence is cited within instant claim 9 as cited to a printed publication by Anderson et al. This specific citation requires the disclosure of sequence in said publication as essential subject matter for the practice of this claim. Such incorporation of essential subject matter for the practice of a claim is improper as also explained in the following paragraph. The amending of the essential subject matter into the claim or specification is required to remove this improper incorporation.

The incorporation of essential material by reference to a foreign application or foreign patent or to a publication

inserted in the specification is improper. Applicant is required to amend the disclosure to include the material incorporated by reference. The amendment must be accompanied by an affidavit or declaration executed by the applicant, or applicant's attorney or agent, stating that the amendatory material consists of the same material incorporated by reference in the referencing application. *In re Hawkins*, 486 F.2d 569, 179 USPQ 157; *In re Hawkins*, 486 F.2d 579, 179 USPQ 163; *In re Hawkins*, 486 F.2d 577, 179 USPQ 167.

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103(a).

Claims 1-8 and 10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Parker et al. (P/N 5,760,205).

This rejection is reiterated and maintained from the previous office action, mailed 10/12/99. Applicants argue that the Parker et al. polymorphisms are different from those given in

instant Table 1. In response it is noted that instant claim 1 includes a segment which includes any one of the polymorphic sites given in Table 1. This is deemed to include segments which contain such sites whatever the actual nucleotide is present in the site. That is, a polymorphic site describes a site with alternate nucleotide options therein depending on what sample is being analyzed, some being mutated forms compared to what may be deemed wild-type. In other words, the presence of a wild-type nucleotide in a particular sample does not change the fact that other samples may have an alternative different nucleotide corresponding to polymorphisms at that site. As instantly claimed, these instantly claimed segments do not exclude fully wild-type segments, albeit wherein sites may be non-wild-type in other segments. The presence of a wild-type nucleotide in the claimed segment is emphasized in instant claim 2 as also given as the nucleotides in columns 2 and 3 of Table 1. Any polymorphic site that is identified in Parker et al. suggests that a wild-type as well as a mutated nucleotide is present therein and thus includes both types of nucleic acid segments. Instant claim 1 includes 10 to 100 nucleotide length segments including any one of the Table 1 polymorphic sites and therefore includes segments that are up to 100 bases on either side of the polymorphic sites of instant Table 1. Consideration of the attached listing of Parker et al. polymorphic sites reveals that several are within

this 100 base segment of instant polymorphism identifications. These are given as the following in the Cambridge numbering from said attached listing: 6427, 6463, 6497, 6542, 6544, 7207, 7705, 7711, 7848, 7858, 7866, 7929, 7974, 8082, 9511-9513, and 10016-10018. It is noted that specific non-wild-type is required in instant claim 9 and thus it is removed from the rejected claims in this rejection.

No claim is allowed.

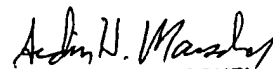
Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993) (See 37 CFR § 1.6(d)). The CM1 Fax Center number is either (703) 308-4242 or (703) 305-3014.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ardin Marschel, Ph.D., whose telephone number is (703) 308-3894. The examiner can normally be reached on Monday-Friday from 8 A.M. to 4 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward, can be reached on (703) 308-4028.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technical Center receptionist whose telephone number is (703) 308-0196.

June 30, 2000

  
ARDIN H. MARSCHEL  
PRIMARY EXAMINER